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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,295

10/20/2003

Richard M. Barrett JR.

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EXAMINER

LEE, CHRISTOPHER E

ART UNIT

PAPER NUMBER

2112

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/689,295	Applicant(s) BARRETT ET AL.	
	Examiner Christopher E. Lee	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-19,22-26,28-32 and 35-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6,9-19 and 22-26 is/are allowed.
- 6) ☒ Claim(s) 27-32 and 35-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt Acknowledgement

1. Receipt is acknowledged of the Amendment filed on 25th of August 2006. Claims 1 and 14 have been amended; claims 7, 8, 20, 21, 33, and 34 have been canceled; and claims 40-45 have been newly added since the CIP Non-Final Office Action was mailed on 25th of May 2006. Currently, claims 1-6, 9-19, 22-26, 28-32, and 35-45 are pending in this Application.

Notice for the benefit of filing date

2. The Examiner notices that the claimed limitations in the claims 40-45 are claimed in this CIP Application 10/689,295, which are not supported by the specification of the parent Application 10/329,101, but by the newly added matters in the specification of this CIP Application. Therefore, **the effective filing date of the newly added claims 40-45 would be 20th of October 2003** in this CIP Application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 27-32, 35-39, 44, and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The claims 27 and 44 recite limitations "the logic encoded in recordable media and when executed selectively: ..." in lines 2+ without a transitional phrase, such as "comprising", "further comprising", "consisting of", etc. (See *M.P.E.P. 2111.03 Transitional Phrase*), respectively. In

fact, the claims don't define their scopes of the claims, respectively, but they merely set forth the intended use of the logic without any body (i.e., structure) of a claiming invention, respectively.

Therefore, the recitation of the intended use of the claiming invention is not clear to particularly point out and distinctly claim the subject matter which applicants regard as the invention, and

5 thus the claims 27 and 44 are indefinite under 35 U.S.C. 112, second paragraph, respectively.

The Examiner presumes the claimed subject matter "the logic encoded in recordable media and when executed selectively:" as --the logic encoded in recordable media comprising the steps of executing to selectively-- for the purpose of claim rejection based on prior art.

The claims 28-39 are dependent claims of the claim 27.

10 The claim 45 is a dependent claim of the claim 44.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al. [US 2006/0098620 A1; hereinafter Zhou] in view of van der Tuijn [US 6,683,886 B1; hereinafter Tuijn].

Referring to claim 40, Zhou discloses a system (i.e., communication systems; See paragraph [0002]) for providing both wireline and wireless connections (i.e., wireline connection between Mobile Bridge 110 and Wired WAN 130, and wireless connection between said Mobile Bridge 110 and Wireless WAN 120 in Fig. 1A) to a wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3; See paragraph [0026]), the system (i.e., said communication systems) comprising:

- a first wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3);
- a second wireline interface (i.e., Wired WAN Ethernet 315 of Fig. 3);
- a wireless interface (i.e., Radio Interfaces 324 of Fig. 3); and
- a switch (i.e., STP Bridge 311 and NAT 314 in Fig. 3) coupled to the first and second wireline and wireless interfaces (See paragraphs [0042]-[0043]), the switch being operable to selectively:
 - couple the first wireline interface (i.e., said Wired LAN Ethernet) to the second wireline interface (i.e., said Wired WAN Ethernet) to allow communication between the first and second wireline interfaces (See paragraph [0028], lines 1-4); and
 - couple the first wireline interface (i.e., said Wired LAN Ethernet) to the wireless interface (i.e., said Radio Interfaces) to allow communication between the first wireline interface and the wireless interface (See paragraph [0028], lines 4-9).

Zhou does not teach the wireless interface comprises a first wireless interface that is operable to communicate with a second wireless interface via a first wireless connection, and further operable to communicate with a third wireless interface via a second wireless

connection; and communications associated with the first wireless connection and communications associated with the second wireless connection are scheduled.

Tuijn discloses a wireless communication method (See col. 1, lines 10-13), wherein

- a first wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master communication device 14 in piconet 12e; See col. 4, lines 25-56) that is

- operable to communicate with a second wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Slave communication device 14 in piconet 12e) via a first wireless connection (See Figs. 3-4, i.e., communication link 16 between said Master communication device and said Slave communication device in said piconet 12e), and further

- operable to communicate with a third wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master/Slave communication device 14 in said piconet) via a second wireless connection (See Figs. 3-4, i.e., communication link 16 between said Master communication device and said Master/Slave communication device in said piconet); and

- communications associated with the first wireless connection and communications associated with the second wireless connection are scheduled (i.e., prioritization; See col. 5, lines 10-18 and 44-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wireless communication method, as disclosed by Tuijn, in said wireless interface (i.e., Radio Interfaces), as disclosed by Zhou, for the advantage of configuring to process the communications (i.e., wireless signals) and to prioritize an order of communications (i.e., communication of the wireless signals) with respective remote communication devices (See Tuijn, col. 3, lines 1-5).

Referring to claim 41, Tuijn teaches

- the communications associated with the first wireless connection and communications associated with the second wireless connection (i.e., wireless communication links 16 in Fig. 3) are scheduled according to a prioritization among a plurality of wireless interfaces (See col. 7, lines 36-40 and 60-67).

Referring to claim 42, Zhou discloses a method (i.e., communication methods; See paragraph [0002]) for providing both wireline and wireless connections (i.e., wireline connection between Mobile Bridge 110 and Wired WAN 130 and wireless connection between said Mobile Bridge 110 and Wireless WAN 120 in Fig. 1A) to a wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3; See paragraph [0026]), the method comprising selectively:

- coupling a first wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3) to a second wireline interface (i.e., Wired WAN Ethernet 315 of Fig. 3) to allow communication between the first and second wireline interfaces (See paragraph [0028], lines 1-4); and
- coupling the first wireline interface (i.e., said Wired LAN Ethernet) to a first wireless interface (i.e., Radio Interfaces 324 of Fig. 3) to allow communication between the first wireline interface and the first wireless interface (See paragraph [0028], lines 4-9).

Zhou does not teach the method further comprising scheduling communications between the first wireless interface and a second wireless interface and communications between the first wireless interface and a third wireless interface.

Tuijn discloses a wireless communication method (See col. 1, lines 10-13), wherein

- scheduling communications (i.e., prioritizing order of communications; See col. 5, lines 10-18 and 44-65) between a first wireless interface (See Figs. 3-4, i.e., communication

circuitry 19 of Master communication device 14 in piconet 12e) and a second wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Slave communication device 14 in piconet 12e) and communications between the first wireless interface and a third wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master/Slave communication device 14 in said piconet; See col. 4, lines 25-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wireless communication method, as disclosed by Tuijn, in said method, as disclosed by Zhou, for the advantage of configuring to process the communications (i.e., wireless signals) and to prioritize an order of communications (i.e., communication of the wireless signals) with respective remote communication devices (See Tuijn, col. 3, lines 1-5).

Referring to claim 43, Tuijn teaches

- scheduling is performed according to a prioritization among a plurality of wireless interfaces (See col. 7, lines 36-40 and 60-67).

Referring to claim 44, Zhou discloses logic (i.e., communication methods; See paragraph [0002]) for providing both wireline and wireless connections (i.e., wireline connection between Mobile Bridge 110 and Wired WAN 130 and wireless connection between said Mobile Bridge 110 and Wireless WAN 120 in Fig. 1A) to a wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3; See paragraph [0026]), the logic encoded in recordable media (i.e., STP bridge software module 311 and NAT/NAPI software module 314 in Fig. 3; See paragraphs [0042] and [0043]) comprising the steps of executing to selectively:

- couples a first wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3) to a second wireline interface (i.e., Wired WAN Ethernet 315 of Fig. 3) to allow communication between the first and second wireline interfaces (See paragraph [0028], lines 1-4); and
- couples the first wireline interface (i.e., said Wired LAN Ethernet) to a first wireless interface (i.e., Radio Interfaces 324 of Fig. 3) to allow communication between the first wireline interface and the first wireless interface (See paragraph [0028], lines 4-9).

Zhou does not teach the logic further scheduling communications between the first wireless interface and a second wireless interface and communications between the first wireless interface and a third wireless interface.

Tuijn discloses a wireless communication method (See col. 1, lines 10-13), wherein

- scheduling communications (i.e., prioritizing order of communications; See col. 5, lines 10-18 and 44-65) between a first wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master communication device 14 in piconet 12e) and a second wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Slave communication device 14 in piconet 12e) and communications between the first wireless interface and a third wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master/Slave communication device 14 in said piconet; See col. 4, lines 25-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wireless communication method, as disclosed by Tuijn, in said logic, as disclosed by Zhou, for the advantage of configuring to process the communications (i.e., wireless signals) and to prioritize an order of communications (i.e., communication of the wireless signals) with respective remote communication devices (See Tuijn, col. 3, lines 1-5).

Referring to claim 45, Tuijn teaches

- scheduling is performed according to a prioritization among a plurality of wireless interfaces (See col. 7, lines 36-40 and 60-67).

Allowable Subject Matter

5 8. Claims 1-6, 9-19, and 22-26 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 1 and 14, the claim limitations of the respective claims 1 and 14 are deemed allowable over the prior art of record as the prior art fails to teach or suggest that the override is delayable until a particular communication between the first wireline interface and
10 the second wireline interface has been completed.

The claims 2-6 and 9-13 are dependent claims of the claim 1.

The claims 15-19 and 22-26 are dependent claims of the claim 14.

Response to Arguments

15 10. Applicants' Response/Amendment filed on 25th of August 2006 does not have any arguments.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this
20 Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this
5 final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Lee whose telephone number is 571-272-3637. The examiner can normally be reached on 9:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
10 supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
15 applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher E. Lee
Primary Patent Examiner
Art Unit 2112



CEL/